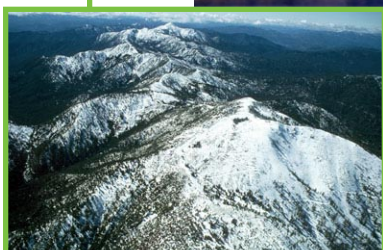


Upper San Joaquin River Basin Storage Investigation

Related Authorities, Regulations, Programs and Groups

Technical Memorandum



Prepared for

Bureau of Reclamation, Mid-Pacific Region
California Department of Water Resources



Section 1

Introduction

1.1 Purpose of Document

This document is intended for use as a guidance tool to identify and describe legal, regulatory, and institutional constraints associated with the Upper San Joaquin River Basin Storage Investigation (USJRBSI). The USJRBSI is being conducted by the Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR) in order to consider a range of approaches for increasing water supplies through the enlargement of Millerton Lake at Friant Dam or a functionally equivalent storage program.

The context in which this Investigation is being conducted includes a complex set of federal, state, and local regulations, with involvement from a wide variety of organizations at all political levels and with varying mandates and policies. Many of the organizations responsible for enforcing regulations, and for developing and implementing policy, are involved in several related programs that affect the water system facilities being studied in this Investigation.

Because the USJRBSI must operate within appropriate regulations and coordinate with related programs, a description of these constraints can aid in understanding the context within which the USJRBSI occurs. This memorandum provides descriptions of 40 authorities, regulations, programs, agreements, and groups related to water issues in the upper San Joaquin River basin (Section 2), and provides information regarding how the constraints interrelate (Section 3). Appendix A provides a compilation of the common acronyms encountered within the context of this Investigation.

1.2 Constraint Categories and Descriptions

The regulations, programs, agreements, and groups described in Section 2 fall into three general categories:

- Federal authorities and regulations;
- State authorities and regulations; and
- Regional and local Memoranda of Understanding (MOUs) and agreements.

An Authority is a power or responsibility granted to a specified entity by the federal or state government and is generally defined in federal or state legislation. The specified entity must uphold the responsibilities delegated to it. Authorities may only be assigned and changed by the appropriate (federal or state) government and, unless specified otherwise, are applicable within the jurisdictional boundaries of the United States or the appropriate state. In the case of the USJRBSI, the federal authority grants the power to the Bureau of Reclamation (Reclamation) to pursue this investigation,

and the state authority grants power to the Department of Water Resources to undertake this investigation.

A Federal Regulation is a rule or set of procedures that is issued by the United States government. These regulations are enforced by designated federal agencies and can only be modified at the national level.

A State Regulation is a rule or set of procedures that is issued through the state government. These regulations are enforced by designated state agencies and can only be modified by an act of the state legislature or a judicial decision.

A Memorandum of Understanding (MOU) provides a formalized organizational structure that allows signatory agencies to pursue a common purpose. An MOU may be formed for any purpose within the authority of each agency. An additional advantage of an MOU for some agencies is that an MOU is formed simply, through signature of the MOU contract by member agencies. MOUs have some limitations, however, in that groups formed as a results of an MOU may not contract, incur debt or employ staff directly.

A Local Agreement is an agreement between two or more parties to pursue joint objectives. These agreements are not necessarily formalized through a specific organizational structure, but rather they exist to help the agreeing parties to achieve common goals.

Section 2

Fact Sheets

Contained in this section are fact sheets that describe authorities, regulations, programs, agreements, and groups related to the context within which the USJRBSI occurs. Each fact sheet includes a brief description, potential impacts and relationships to the USJRBSI, geographic applicability, agencies involved, information contact points, and the year of initiation or period of effect. For the reader's information, acronyms in use are identified, even if they are not repeated later in the text of this document. (See Appendix A for a compilation of acronym definitions.)

The list below shows the order in which the fact sheets are included.

Federal Authorities and Regulations

1. 1902 Reclamation Act (an authority)
2. The Central Valley Project (Public Law 75-392 Section 2)
3. Safe Drinking Water Act
4. Clean Water Act (CWA)
5. Federal Endangered Species Act (ESA)
6. Central Valley Project Improvement Act (CVPIA)
7. National Environmental Policy Act (NEPA)
8. National Historic Preservation Act (NHPA)
9. Indian Trust Assets
10. Magnuson-Stevens Fishery Conservation and Management Act
11. USACE Water Control Manual
12. 1944 Flood Control Act
13. Resource Conservation and Development (RC&D) Program
14. Watershed Protection and Flood Protection Act
15. Executive Order 11988 (Floodplain Management, 1977)
16. Clean Air Act General Conformity Rule

State Authorities and Regulations

1. Department of Water Resources (DWR) Creation (an authority)
2. California Endangered Species Act
3. California Department of Fish and Game, 1601 Process
4. California Department of Fish and Game, 5937 Process
5. California Environmental Quality Act (CEQA)
6. Area of Origin Statutes
7. Water Rights (appropriative and riparian rights)
8. State Reclamation Board Water Code 8608 and 8571
9. Porter-Cologne Act
10. Resource Conservation Districts

Regional and Local MOUs and Agreements

1. Monterey Agreement
2. Vernalis Adaptive Management Plan (VAMP)
3. San Joaquin River Management Agreement
4. Kings River Fisheries Management Program Framework Agreement (Kings River Agreement)
5. Water Service Contracts (Exchange Contractors)
6. Mendota Pool contracts (Mendota Pool 2001 Exchange Agreements)
7. Coordinated Operation Agreement
8. Joint Use Agreement
9. CALFED Bay Delta Program (also an authority)
10. Integrated Storage Investigation (ISI) Memoranda of Understanding (MOUs) for Conjunctive Use
11. Mammoth Pool Agreement
12. San Joaquin River Management Program
13. Delta Pumping Plant Fish Protection (4-Pumps) Agreement
14. Sacramento-San Joaquin River Basin Comprehensive Study

1902 Reclamation Act**F1****Authority****Brief Description**

The Reclamation Act of 1902 authorizes the federal government to investigate and implement water resource projects. It directed the Secretary of Interior to “make examinations and survey for, and to locate and construct, as herein provided, irrigation works for the storage, diversions, and development of waters... and to report to Congress... the results of such examinations and surveys” and associated costs of implementing the project. Furthermore, this act states: “The right to the use of water acquired under the provision of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right.” The protection and operation of these water projects are to be the responsibility of the Federal government, unless specified otherwise through Congress.

Potential Impact

Reclamation is conducting the USJRBSI in accordance with the 1902 Reclamation Act, This investigation will adhere to the “Economic and Environmental Principles and Guidelines for Water and Related Land resources Implementation Studies” (P&G) and the Department of Interior and Reclamation planning guidelines. Reclamation will develop a series of plans to be addressed during the Investigation and ultimately identify the National Economic Development plan (the Federal interest plan). Consultation with environmental cultural and resource specialists and with appropriate agencies (Fish and Wildlife, National Marine Fisheries, Bureau of Indian Affairs, Environmental Protection Agency, and the Corps of Engineers) will also be the responsibility of Reclamation.

Geographic Applicability

United States

Agencies or Parties Involved

Reclamation

Contact for More Information

<http://ccrh.org/comm/umatilla/primary/newlands.htm>

Year of Initiation

1902

The Central Valley Project (Public Law 75-392 Section 2) **F2**

Authority

Brief Description

The Central Valley Project¹ was initially authorized under the Act of August 26, 1937² and reauthorized in accordance to several other Acts that expanded the project's scope of objectives. The Act of October 17, 1940³ expanded the project's purpose to include energy development, navigation improvements, and flood control while the Act of October 14, 1949⁴, redefined the project's boundaries by adding Folsom dam and reservoir. The Act of September 26, 1950⁵, further expanded the benefits of the CVP by including irrigation and the regulation of flow of the San Joaquin and Sacramento Rivers. Benefits were further expanded on August 27, 1954, November 8, 1978⁷, and October 30, 1992⁸, which provided the authority and defined the conditions in which water should be supplied to wildlife refuges in the Central Valley and Trinity River basins.

¹ 16 U.S.C. 695d-695j, ² Public Law 75-392 Section 2 or 50 Stat. 844, 850, ³ 54 Stat. 1198, 1199, ⁴ 63 Stat 852, ⁵ 64 Stat. 1036, ⁶ P.L. 674, ⁷ P.L. 95-616, ⁸ P.L. 102-575

Potential Impact

Public Law 75-392, initially authorizing the Central Valley Project, and subsequently followed by a series of Acts, supports Reclamation's authority to conduct the USJRBSI. The objectives of the USJRBSI, to access water supply alternatives for environmental and municipal beneficial uses, clearly fit into the objective criteria defined by these Acts.

Geographic Applicability

United States

Agencies or Parties Involved

Reclamation

Contact for More Information

<http://www4.law.cornell.edu/uscode/>

Year of Initiation

1937

Safe Drinking Water Act

F3

Federal Regulation

Brief Description

The Safe Drinking Water Act (SDWA) was passed in 1974, authorizing the EPA to develop two levels of drinking water quality standards. The SDWA primary standards, including Maximum Contaminant Levels (MCL), are intended to protect consumers from contaminants that could potentially cause adverse health effects. The SDWA secondary standards focus on parameters that reflect the aesthetic quality of drinking water. Amendments in 1986 focused on surface water treatment and required water suppliers to monitor additional contaminants that did not yet have an established MCL and in 1996, additional amendments further addressed microbial contamination and disinfection by-products. In 1976, California passed a state-level SDWA that gave the California Department of Health Services (DHS) authority to enforce the primary standards and the majority of secondary standards. These standards are an important component of DHS's drinking water program and are found in California Code of Regulations, Title 22.

Potential Impact

Drinking water could be one of the beneficial uses of additional storage in the Upper San Joaquin basin; therefore, the water designated for drinking water would have to meet the SDWA standards following treatment. The level and cost of treatment of this storage would be influenced by the quality of stored (pre-treated) water. Various storage opportunities studied in the USJRBSI may have varying levels of stored water quality.

Geographic Applicability

United States

Agencies or Parties Involved

California Department of Health Services, local water suppliers

Contact for More Information

Bulletin 160-93, <http://rubicon.water.ca/v1cwp/ifrmwk.html>

Year of Initiation

1974

Clean Water Act

F4

Federal Regulation

Brief Description

The Clean Water Act (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States. It gave EPA the authority to implement pollution control programs, such as wastewater standards for industry. The CWA also expanded requirements to set water quality standards for all contaminants in surface waters. The CWA made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under CWA provisions. States, including California, may be delegated authority under the CWA and these states must develop a set of water quality standards and review them on a reasonable basis. In California, the State Board adopts water quality control plans to meet this requirement. The CWA requires that state water quality standards specify “appropriate water uses to be achieved and protected.” Water quality standards protect these “designated uses” based upon the most practical and/or available technologies in each area. Standard development, enforcement, and review are the responsibility of each delegated state.

The CWA also established the National Pollutant Discharge Elimination System (NPDES), which regulates the discharge of waste by requiring permits for waste disposal in national waters or wetlands. These permits require that an appropriate level of review and analysis be performed to ensure that the discharge will not have negative impacts on endangered species or historic properties.

In California, the Regional Water Quality Control Boards are responsible for certifying discharges. Total Maximum Daily Loads (TMDLs) are also being developed for “impaired water bodies” in the United States. TMDLs specify the quantity and quality of discharges that may occur into a specific water body without decreasing the beneficial uses of the water significantly.

Potential Impact

A variety of contaminants have degraded the water quality of the San Joaquin River and TMDLs are being developed for selenium, dissolved oxygen and various other constituents. The river receives agricultural runoff, wastewater treatment plant discharges and urban runoff, and it is highly regulated based on upstream reservoir releases and agricultural and municipal diversions. If water storage were increased in the Upper San Joaquin River basin, increased releases of higher quality water could potentially provide a management tool to aid in the regulation of water quality in the lower reaches of the San Joaquin River.

Geographic Applicability

United States waters

Agencies or Parties Involved

USEPA, Regional Water Quality Control Boards

Contact for More Information

Bulletin 160-93, <http://rubicon.water.ca/v1cwp/ifrmwk.html> or
<http://www.sjrtmdl.org>

Year of initiation

1977

Federal Endangered Species Act

F5

Federal Regulation

Brief Description

The Federal Endangered Species Act prohibits a variety of actions that constitute an authorized “taking” of endangered or threatened species that are listed by the Fish and Wildlife Service (USFWS). Taking actions include harassment, pursuance, hunting, shooting, wounding, killing, trapping, capture, collecting, or an attempt to conduct any of these actions. The USFWS and National Marine Fisheries Services (NMFS) provide assistance other agencies, ensuring that federal projects have minimum impacts on listed species and their habitats. Special provisions to this law may be made if an action is proven to be incidental as specified in Section 7 of the Act, or if a proper permit is acquired for a take. The NMFS and USFWS, in addition to other federal and state agencies, require permits for species takings.

Potential Impact

The ESA requires that the USJRBSI include an identification and evaluation of potential impacts on listed endangered species. If the USJRBSI proceeds to a second phase, a “Biological Assessment” or its equivalent will need to be prepared to determine potential adverse endangered and threatened species effects of implementing the proposed action. Consultation will have to occur with the USFWS to identify whether any of the proposed actions could significantly harm enlisted species. The USFWS will issue a Biological Opinion with recommendations for avoiding adverse effects and/or for compensating for unavoidable adverse effects. Permits may also be required for activities that could negatively affect the habitat of listed species (such as the installation of wells and pipelines). Specialists should be consulted to determine the appropriate permits.

Geographic Applicability

United States

Agencies or Parties Involved

USFWS, Reclamation, DWR, NMFS

Contact for More Information

<http://eelink.net/EndSpp/>

Year of Initiation

1973

Central Valley Project Improvement Act

F6

Federal Regulation

Brief Description

The Central Valley Project Improvement Act (CVPIA) (Title 34 of Public Law 102-575) amends the Central Valley Project (CVP) to “include fish and wildlife protection, restoration and mitigation as project purposes having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement having equal priority with power generation.”

Objectives of the CVPIA include: protecting, restoring, and enhancing fish and wildlife habitat; addressing environmental impacts; increasing operational flexibility and water-related benefits of the CVP while improving the balance of demand among CVP users; and contributing to the States’ efforts in protecting the Bay-Delta Region. Section 3406[b][2] dedicates 800 thousand acre feet of CVP yield for fish and wildlife. The locations, timings of water acquisitions, and quantity of water acquired for this program are to be based upon biological need, hydrologic characteristics (including operations) of streams, and economic considerations.

Potential Impact

The CVPIA Operating Principles require development of a comprehensive plan of improvements designed to provide naturally reproducing anadromous fisheries in the San Joaquin River downstream of Friant Dam. It also states “During the time that the Secretary is developing the plan provided for in this subsection, and until such time as Congress has authorized the Secretary to implement such plan, with or without modification, the Secretary shall not, as a measure to implement this title, make releases for the restoration of flows between Gravelly Ford and the Mendota Pool and shall not thereafter make such releases as a measure to implement this title without a specific Act of Congress authorizing such releases.” This plan, which is being developed, could change the patterns of releases at Friant Dam. The USJRBSI will need to consider the results of efforts to meet Section 3408(j) of the CVPIA, which states that a least-cost plan to augment the CVP yield by the amount dedicated to fish and wildlife must be developed. This plan is under development currently.

Geographic Applicability

Millerton Lake, the Friant-Kern Canal, the Madera Canal, and the San Joaquin River

Agencies or Parties Involved

Reclamation, US Fish and Wildlife

Contact for More Information

<http://rubicon.water.ca.gov/v1cwp/ifrmwk.html>

Year of Initiation

1992

National Environmental Policy Act

F7

Federal Regulation

Brief Description

The National Environmental Policy Act of 1969 (NEPA) provides for public participation in the planning process to ensure that a proposed federal action's potential to result in a significant impact on the human environment is evaluated, disclosed, and considered prior to federal decision-makers approving the action. As part of the established process, NEPA includes requirements for the identification and evaluation of alternatives to, and mitigation measures for, the proposed action as a means to avoid or reduce any significant impacts. The California Environmental Quality Act of 1970 (CEQA) is modeled after NEPA and applies to all California government levels. The required analysis and presentation of impact results must use an interdisciplinary systematic approach, and projects may require preparation of a comprehensive Environmental Impact Report (EIR) or Statement (EIS).

Potential Impact

NEPA/CEQA regulations require that an appropriate level of analysis be conducted during an investigation phase to identify and document the impacts that the proposed action/project could potentially have on the environment. If the USJRBSI proceeds to a second phase, the NEPA/CEQA processes would be engaged and an Environmental Assessment (EA)/Initial Study (IS) would be prepared to provide a preliminary analysis of potential environmental impacts and to the appropriate NEPA/CEQA document(s) to prepare given those impacts. Based on the nature, size, and location of a potential USJRBSI project, it is likely that the EA/IS would conclude that preparation of an EIS/EIR is appropriate for the project (rather than a Finding of No Significant (FONSI)/Mitigated Negative Declaration (MND)). A formal EIS/EIR document would then be developed that documents the data/resources, methods of analyses, feasible alternatives, mitigation strategies, and results of the analyses.

Preparation of an EIS/EIR would include, but not be limited to, completion of various technical studies and engagement of a process that fosters public and agency review and input. The agencies would make a Draft EIS/EIR available for review and within a specified period of time (typically 45-60 days), written comments on the Draft EIS/EIR could be submitted to the federal and state lead agencies. Written responses to the comments would be prepared and integrated with the Draft EIS/EIR to comprise the Final EIS/EIR for review and consideration by decision-makers prior to taking action on the project. Through the NEPA/CEQA processes, the proposed project may need to be refined, or possibly revised/replaced, as necessary to avoid or reduce significant impacts.

Geographic Applicability

NEPA – United States

CEQA – State of California

Agencies or Parties Involved

State and Federal agencies involved in implementing permitting or financing the specific project. NEPA is implemented by the federal lead agency and CEQA is implemented by the state lead agency, which in the case of the USJRBSI are Reclamation and DWR, respectively.

Contact for More Information

<http://es.epa.gov/oeca/ofa/nepa.html>

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/

Year of Initiation

NEPA – 1969

CEQA – 1970

National Historic Preservation Act (NHPA)

F8

Federal Regulation

Brief Description

The National Historic Preservation Act (16 U.S.C. 470) of 1966 (NHPA) was established to provide a “Program for the Preservation of Additional Historic Properties throughout the Nation, and for Other Purposes.” The NHPA created the Advisory Council on Historic Preservation (ACHP), which, as an independent Federal agency, has the responsibility to advise the President and Congress on issues regarding historic preservation. The NHPA directs federal agencies to integrate historic preservation into all activities that either directly or indirectly involve land use decisions.

Before approving or carrying out an action (project) with federal involvement, Section 106 of the NHPA requires federal agencies to take into consideration the impact that the action may have on historic properties, including archaeological sites that are included on (or are eligible for inclusion on) the National Register of Historic Places (NHRP). In fulfilling the requirements of Section 106, federal agencies are required to: (1) identify and evaluate any historic properties that might be impacted by the action; (2) determine effect of the action on these properties; and (3) develop alternatives and measures to avoid or mitigate adverse effects. The Section 106 review process is usually carried out as part of a formal consultation with the State Historic Preservation Officer (SHPO), the Tribal Historic Preservation Officer (for federal actions on tribal lands), the ACHP, and other parties that have knowledge of, or a particular interest in, historic resources in the project area. Formal consultation is concluded upon preparation of a Memorandum of Agreement (MOA) among the consulting parties. This MOA addresses the treatment of any adverse effects.

Potential Impact

The NHPA requires that, if Phase II of the USJRBSI moves forward, a survey would be required to identify and evaluate any existing historic structures/properties or archeological sites that are listed (or are eligible to be listed) under the NHRP. The survey and evaluation would be based upon the proposed action’s “area of potential effect” (APE) as determined based on federal criteria. If historic properties might be affected, further evaluation of the properties, in conjunction with SHPO consultation and other consulting parties, would have to occur. The evaluation would include identification and consideration of alternatives and measures that serve to avoid or reduce adverse effects to historic properties. Completion of the formal consultation process, including development of a Memorandum of Agreement, would need to occur prior to implementation of the proposed alternative. The Section 106 review process can be (and is encouraged by federal guidelines to be) coordinated with other federal reviews such as that associated with the National Environmental Policy Act (see below).

Geographic Applicability

United States

Agencies or Parties Involved

Federal - ACHP, Reclamation; State - SHPO;

If Indian Tribal lands are affected - THPO

Contact for More Information

http://ceres.ca.gov/wetlands/permitting/NHPA_summary.html, and

<http://www.achp.gov>

Year of Initiation

1966

Indian Trust Assets

F9

Federal Regulation, Laws, and Policy

Brief Description

Indian Trust Assets are legal interests in property held in trust by the United States for federally recognized Indian tribes or individual Indians. Indian trust assets may include lands, minerals, money, timber, hunting and fishing rights, water rights, and other natural resources. The location of Indian trust assets can be on or off Indian reservations or Rancherias. These trust assets cannot be sold, leased, alienated, or reduced in value without approval from the U.S. Department of the Interior.

Department of Interior Manual, Part 512.2 directs Interior to fulfill its “legal obligations to identify, protect, and conserve the trust resources of federally recognized Indian tribes and tribal members.” The Bureau of Reclamation’s Indian Trust Asset Policy (1993) states, “The United States has a trust responsibility to protect and maintain rights reserved by or granted to American Indian tribes or individuals by treaties, statutes, and executive orders. This trust responsibility requires that all Federal Agencies take all actions reasonably necessary to protect trust assets.”

The federal protection of Indian Trust Assets has evolved throughout the history of the United States. The nature of this protection can not be found in any one law, Executive Order, treaty or court decision, but is the cumulative embodiment of over 200 years of such actions, known as Federal Indian Law.

Potential Impact

The CALFED Bay-Delta Program Final Programmatic Environmental Impact Statement/Environmental Impact Report stated that Indian trust assets would be protected for all CALFED actions that could result in a potential impact. This process/research required to identify potential impacts will involve consultation with the affected tribes by the lead federal agency before implementation of any proposed alternative. If consultations with tribes indicate that Indian trust assets may be affected, further consultation with tribes would be required to determine acceptable mitigation measures. Such measures may need the approval of the Bureau of Indian Affairs. Some alternatives, such as enlarging Friant Dam, might affect Indian trust assets and could require mitigation.

Geographic Applicability

United States

Agencies or Parties Involved

Indian trust assets and potential impacts should be identified in consultation with the affected federally recognized Indian tribes. Formal consultation with Indian tribes is an inherent federal function and cannot be delegated. Other consultation activities may include contact with the Bureau of Indian Affairs, the Office of American Indian

Trust, the Solicitor's Office, Reclamation's Mid-Pacific Region Native American Affairs Office, or Reclamation's Area Office Native American Affairs Coordinator.

Contact for More Information

CALFED Bay-Delta Program Guide to Regulatory Compliance for Implementing
CALFED Actions Volume 2: Environmental Regulatory Process June 2001
<http://www.doi.gov/news/trustdoc4.htm>

Period of Effect

Over 200 years

Magnuson-Stevens Fishery Conservation and Mgt. Act **F10**

Federal Regulation

Brief Description

The primary objectives of the Magnuson-Stevens Fishery Conservation and Management Act include “the conservation and management of U.S. fishery resources, development of U.S. domestic fisheries, and phasing out foreign fishing activities within the 200-mile fisheries conservation zone adjacent to the U.S. coastline.” The act created eight Regional Fishery Management Councils that are responsible for implementing these objectives in coordination with National Marine Fisheries Service (NMFS), as well as achieving a balance between users, science, economics, environmental, and social factors. Resources must often be allocated among competing users. The Southwest Regional Office, responsible for the Upper San Joaquin River area and the River downstream of Friant Dam, is headquartered Longbeach, California.

Potential Impact

The Magnuson-Stevens Fishery Conservation and Management Act requires that a collaborative effort be made to manage and maintain healthy fish populations in the San Joaquin River. Section 1855 specifies: “The Secretary, in consultation with participants in the fishery, shall provide each Council with recommendations and information regarding each fishery under that Council’s authority to assist it in the identification of essential fish habitat, the adverse impacts on that habitat, and the actions that should be considered to ensure the conservation and enhancement of that habitat.” Areas in the San Joaquin River that are considered “essential habitat” for the conservation of endangered species “may require special management considerations and protection.” Additional storage proposed by the USJRBSI could aid in this protection by increasing water management flexibility.

Geographic Applicability

Federal waters within the interior United States and ocean extending 200 miles from the edge of State waters. The entire reach of the San Joaquin River from Friant Dam to the confluence with the Bay-Delta is considered essential fish habitat.

Agencies or Parties Involved

NMFS

Contact for More Information

<http://www.legislative.noaa.gov/magsteve.html>

<http://swr.ucsd.edu/hcd/efhqaca.htm>

Year of Initiation

1976

USACE Water Control Manual

F11

Federal Regulation

Brief Description

(to be completed)

Potential Impact

(to be completed)

Geographic Applicability

(to be completed)

Agencies or Parties Involved

(to be completed)

Contact for More Information

(to be completed)

Year of Initiation

(to be completed)

1944 Flood Control Act

F12

Federal Regulation

Brief Description

The Flood Control Act, which has several amendments and supplements, authorizes the construction of various water development works for purposes of flood control, navigation, and water projects that have beneficial use. This Act specifies the roles and relationships that should be established on a federal and state level for both flood protection and irrigation works. Flood Control plans, proposals, or reports should be submitted to Congress only after “investigations which form the basis of any such plans, proposals, or reports [are] conducted in such a manner as to give to the affected State or States, during the course of the investigations, information developed by the investigations.” The Act further states that submitted Flood Control plans should have provided “opportunity for consultation regarding plans and proposals, and to the extent deemed practicable by the Chief of Engineers, opportunity to cooperate in the investigations.”

Potential Impact

In conjunction with studying additional storage opportunities, the USJRBSI will also identify new flood damage reduction opportunities. Investigation of potential flood damage reduction opportunities will be coordinated between the Reclamation and Army Corps of Engineers. Identified potential flood damage reduction options include: additional flood storage options at or above Friant Dam, specified flood flow releases to San Joaquin River, and modifications to the current flood conveyance system. During the USJRBSI, an appropriate level of communication and consultation between the project developers and the State of California will be conducted in adherence to the Flood Control Act.

Geographic Applicability

United States

Agencies or Parties Involved

Reclamation, DWR, Army Corps of Engineers

Contact for More Information

<http://www.usbr.gov/laws/floodcor.html>

Year of Initiation

1944

Resource Conservation and Development Program **F13**

Federal Program

Brief Description

The Resource Conservation and Development (RC&D) Program was authorized by the Food and Agriculture Act of 1962 and re-authorized by the Federal Agriculture-Improvement and Reform Act of 1996. The National Association of Resource Conservation and Development Councils (NARC&DC) represents over 360 RC&D Councils that encourage resource conservation efforts and rural development. These councils provide local leadership to coordinate combined efforts of private citizens and local, state, and federal agencies to promote economic, social and environmental improvements. The Secretary of Agriculture authorizes RC&D regions and the Natural Resources Conservation Service (NRCS) provides a full-time coordinator to each council. Local volunteers within each council are responsible for the multiple number of RC&D projects that aim to address land conservation, water management, economic development, and community sustainability issues.

Potential Impact

Although an RC&D region has not been authorized for the San Joaquin Valley, several San Joaquin River tributaries are within authorized RC&D regions. These councils are a valuable source of information that could aid the USJRBSI stakeholder process. The storage enhancement alternatives could influence water conservation strategies, depending on if a storage enhancement action is implemented. It is important to inform the councils of what actions may be made.

Geographic Applicability

United States

Agencies or Parties Involved

NRCS, volunteers, various state, tribal, local government, and non-profit organizations

Contact for More Information

<http://www.nrcs.usda.gov/program/rcd/>

Year of Initiation

1962

Watershed Protection and Flood Prevention Act**F14****Federal Regulation****Brief Description**

The Watershed Protection and Flood Prevention Act authorizes the Secretary of Agriculture to provide planning and financial assistance to local agencies for flood control works and other plans intended to conserve and “develop the land’s soil, water, woodland, wildlife, energy and recreation resources and enhance water quality.” The Secretary of Agriculture must also enter cost-sharing agreements with landowners and operators, coordinating with other Federal agencies to meet the objectives of the plans. The Secretary of Agriculture must notify the Secretary of Interior of the proposed plans if they involve irrigation lands, public lands, or wildlife under the Secretary jurisdiction. The Secretary of Interior must submit his or her view of the plan to Congress and may also participate in the preparation of plans, investigations, and the development of recommendations. The submitted plan must contain “technically and economically feasible works of improvement for wildlife purposes, to the extent these are agreed to by the Secretary and local organization.”

Potential Impact

Although the USJRBSI is not receiving any financial assistance from the Secretary of Agriculture, the USJRBSI planning effort must be coordinated with the Secretary of Agriculture and submitted to the Secretary of Interior because the project will affect public lands and wildlife and, according to an amendment in 1986, must contain agriculture benefits for at least 20 percent of the total project benefits. The Secretary of Interior’s comments will be submitted with the final USJRBSI plans to Congress for approval.

Geographic Applicability

United States

Agencies or Parties Involved

Soil Conservation Service at the Department of Agriculture, Secretary of Interior, Congress, and local organizations including: state or political subdivisions; soil or water conservation districts; flood prevention or control districts; other agencies with state or tribal authority to implement improvements; or nonprofit irrigation or reservoir companies, water users’ associations or similar organizations.

Contact for More Information

http://www.nrcs.usda.gov/programs/wetlands_new/pl566_maindir/law.html
<http://ipl.unm.edu/cwl/fedbook/wpfp.html>

Year of Initiation

1954, as amended 1956, 1958, 1960-1962, 1965, 1968, 1972, 1975, 1977, 1979, 1981, 1986, 1990, 1994 and 1996.

Executive Order 11988 (Floodplain Management, 1977) **F15**

Federal Regulation

Brief Description

Executive Order 11988 requires federal agencies to “Avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative” in the 100-year flood plain. This is intended to reduce the risks associated with flooding by preserving the natural flood plains. Federal actions that could negatively impact a floodplain and that require an EIS must address alternatives that either avoid or minimize adverse impacts in the EIS.

Potential Impact

In accordance with Executive Order 11988, the USJRBSI will have to assess whether the proposed storage alternatives adversely impact the surrounding floodplain, increasing the risk of flood losses in the surrounding area. If it is concluded that the enhanced storage could adversely impact these areas, alternatives that avoid or minimize impacts would need to be evaluated and documented in the second phase of the USJRBSI.

Geographic Applicability

United States

Agencies and Parties Involved

Reclamation

Contact

<http://hydra.gsa.gov/pbs/pt/call-in/eo11988.htm>

Year of Initiation

1977

Clean Air Act General Conformity Rule**F16****Federal Regulation****Brief Description**

Effective January 1994, 40 CFR Part 51 Subpart W requires that all federal actions conform to the applicable State Implementation Plan (SIP) per the Clean Air Act (CAA). The general conformity rule covers direct and indirect emissions of criteria pollutants or their precursors that are caused by the federal action, are reasonably foreseeable, and can be controlled practicably by the federal agency responsible for the action. The general conformity rule provides criteria for assessing whether particular actions are subject to the overall conformity requirements, defines specific activities for which a conformity determination is not required, and establishes emissions levels below which activities may be considered “insignificant activities” relative to the requirements.

Potential Impact

Depending on the level of specificity developed for the USJRBSI alternatives, a general conformity determination may be necessary. While the long-term operation of a project is unlikely to have a notable air quality impact, construction activities associated with certain alternatives could result in notable emissions of criteria pollutants, particularly NO_x. To the extent such construction activities can be reasonably defined or otherwise anticipated, the resultant emissions would be considered reasonably foreseeable and quantified estimates would need to be developed. The emission estimates, quantified in terms of tons per year, would be compared to the CAA general conformity criteria applicable to the project’s air basin and if the estimated emissions exceed thresholds, a more extensive evaluation would be required. Thresholds vary based on degree to which the basin is in attainment or non-attainment of the National Ambient Air Quality Standards.

Geographic Applicability

United States

Agencies and Parties Involved

Reclamation

Contact<http://www.uscg.mil/mlclant/ldiv/air.htm>**Year of Initiation**

1994

Department of Water Resources (DWR) Creation

S1

Authority

Brief Description

According to Water Code Section 227, DWR can identify and study natural areas that could potentially serve as reservoirs or as part of a reservoir system, as long as the water to be gathered is not designated for beneficial uses. DWR investigations can encompass the feasibility of the project, the quantity of potential supply, the amount of land that could be irrigated, and the cost of the project.

Potential Impact

DWR will be involved actively with the USJRBSI by participating in the development of alternatives and by ensuring that the CEQA regulations are followed. As the lead State agency, DWR will also be responsible for coordinating with other State of California projects that have the potential to affect the alternatives development. DWR will also coordinate with the Integrated Storage Investigation (ISI) program to develop and evaluate conjunctive use opportunities. Reclamation and DWR will coordinate efforts in establishing the National Economic Development plan and locally preferred plan, if needed. The USJRBSI does not include all of these elements in Phase 1, but will include them in later phases, if implemented.

Geographic Applicability

State of California

Agencies or Parties Involved

DWR

Contact for More Information

<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wat&group=00001-01000&file=225-238>

<http://www.dwr.water.ca.gov/>

California Endangered Species Act

S2

State Regulation

Brief Description

California's State Endangered species Act (CESA) (Fish and Game Code Sections 2050 to 2097) is similar to the Federal Endangered Species Act. The California Department of Fish and Game (CDFG) is responsible for administering this act and maintaining the California listing of threatened and endangered species, which may be changed through a petitioning process. CESA prohibits the "take" of listed and candidate (petitioned to be listed) species, "Take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill." In order to ensure that all actions proposed by an agency do not "jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat," lead agencies must seek consultation with the CDFG prior to project implementation.

Potential Impact

The CESA requires that an evaluation of potential impacts on state-listed species be included in the USJRBSI. If this evaluation concludes that state-listed species could be threatened, a consultation with the CDFG will be required. Section 2091 allows the takings of species if "the take is incidental to carrying out an otherwise lawful project that has been approved under the California Environmental Quality Act (CEQA)" and CDFG has formally been consulted. "Incidental takes" require a permit and will be reviewed based on "the determination that the take authorized by the permit will be incidental to and otherwise lawful activity; that the applicant will minimize and fully mitigate the impact of the take authorized under the permit; that measures required to meet this obligation are roughly proportional in extent to the impact of the authorization taking on the species; that if various measures are capable of fully mitigating the impact, then the measures included as permit condition shall maintain the applicant's objectives to the greatest extent possible; and that the measures must be capable of successful implementation."

Geographic Applicability

State of California

Agencies or Parties Involved

CDFG

Contact for More Information

<http://www.dfg.ca.gov/legal/intro.html>

Year of Initiation

1970

California Department of Fish and Game, 1601 Process

State Regulation

Brief Description

Section 1601 of the California Fish and Game Code applies to public agency projects that “may cause diversions, obstructions, or changes to the natural flow of the bed, channel, or bank of any river, stream, or lake in California that supports fish or wildlife resources subject to regulation by the California Department of Fish and Game (CDFG).” The CDFG enforces a “no net loss” of habitat policy. Under section 1601, consultation with the CDFG and an agreement with the CDFG regarding streambed or lakebed alterations may be necessary before a project is implemented. This consultation process is intended to ensure that appropriate levels of conservation measures are met and/or agreed upon, thereby protecting the environment from project impacts to the habitat and wildlife of a given area.

Potential Impact

Section 1601 requires that representatives of the USJRBSI would have to be in consultation with the CDFG prior to implementation of projects resulting from the USJRBSI. To comply with CDFG 1601, any project resulting from the USJRBSI would need to incorporate appropriate conservation strategies so that project impacts would not result in a net loss of habitat within the local area.

Geographic Applicability

State of California

Agencies or Parties Involved

CDFG and public agencies implementing projects that could alter water resources that support fish and wildlife regulated by the CDFG

Contact for More Information

<http://www.leginfo.ca.gov/cgi-bin/calawquery>

California Department of Fish and Game, 5937 Process

State Regulation

Brief Description

Section 5937 of the California Fish and Game Code applies to any owner of a dam and states that the dam “shall allow sufficient water at all times to pass through a fish way, or in the absence of a fish way, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam.” The California Department of Fish and Game (CDFG) has the authority to enforce this requirement.

Potential Impact

The USJRBSI must assess the impacts that the proposed storage enhancement alternatives could have on fish populations downstream. Any operational changes due to the raising of Friant Dam could potentially influence fishery habitat downstream. Other functionally equivalent alternatives could also affect downstream conditions.

Geographic Applicability

State of California

Agencies or Parties Involved

CDFG and public agencies implementing projects that could alter water resources that support fish and wildlife regulated by the CDFG

Contact for More Information

<http://caselaw.lp.findlaw.com/cacodes/fgc/5930-5948.html>

California Environmental Quality Act (CEQA)

S5

State Regulation

Brief Description

The California Environmental Quality Act of 1970 (CEQA) is modeled after NEPA and not only enforces the education of decision makers and the public regarding the potential impacts project actions may have on the environment, but also identifies methods that may be applied to reduce or avoid negative impacts. CEQA applies to all actions that are implemented by a public agency or a private agency in which their actions require a level of governmental approval and/or may cause a direct or indirect change to the environment. The required analysis and presentation of impact results must use an interdisciplinary systematic approach in which either a notice of exemption, a negative declaration or mitigated negative declaration, or an Environmental Impact Report (EIR) is provided.

Potential Impact

CEQA regulations require an appropriate level of analysis during an investigation phase to identify and document the effects that a proposed project could have on the environment. If the USJRBSI proceeds beyond its first phase, the CEQA processes would be engaged and an Initial Study (IS) would be prepared to provide a preliminary analysis of potential environmental impacts and, in light of such impacts, determine which CEQA document(s) to prepare. Based on the nature, size, and location of the USJRBSI project, it is likely that the IS would conclude that preparation of an EIR is appropriate for the project (as opposed to a mitigated negative declaration). A formal EIR document would then be developed that documents the data, resources, methods of analyses, feasible alternatives, mitigation strategies, and results of the analyses.

Preparation of the EIR would include, but not be limited to, completion of various technical studies and engagement of a process that fosters public and agency review and input. A Draft EIR for the proposed project would be made available for public and agency review and within a specified period of time (typically 45-60 days) written comments on the Draft EIR could be submitted to the lead agencies. Written responses to the comments would be prepared and integrated with the Draft EIR to comprise the Final EIR for review and consideration by decision-makers prior to taking action on the project. Through the CEQA processes, the proposed project may need to be refined, or possibly revised or replaced to avoid or reduce significant impacts. The CEQA process parallels the NEPA process, as described in the NEPA discussion (F6).

Geographic Applicability

State of California

Agencies or Parties Involved

Reclamation and State and Federal agencies involved in implementing permitting

Contact for More Information

http://ceres.ca.gov/topic/env_law/ceqa/guidelines/

Year of Initiation

1970

Area of Origin Statutes

S6

State Regulation

Brief Description

The area of origin statutes were originally developed to protect local Northern California supplies. During the development of the Central Valley Project (CVP) and the State Water Project (SWP), concerns focused on the projects' potential to deplete water supplies in Northern California for use in Southern California. The provisions of these statutes require that construction and operations of the CVP and SWP projects "not deprive the watershed, or area where water originates, or immediately adjacent areas which can be conveniently supplied with water, of the prior right to water reasonably required to supply the present or future beneficial needs of the watershed areas or any of its inhabitants or property owners."

Water Codes Sections 10504.01 and 10505 pertain to "county-of-origin" protections. This statute affords lands within the county of origin of a river a priority to the water over water right holders that export water from the watershed of that river.

Water Code Sections 11460-11463 pertain to "watershed-of-origin" protections. These statutes afford lands within a watershed of a river a water right to use or develop water that takes priority over water rights for the export of water from that watershed. The watershed of origin protections also apply to the area where water originates, or an area immediately adjacent to it that can conveniently be supplied with water from it.

Potential Impact

As California continues to grow and the demand for water increases, lawsuits based on the premises of the area of origin statutes will increase. Presently, there are several applications pending before the State Water Resources Control Board based on area-of-origin claims. Two applications, filed by the Westlands Water District, are asserting a priority (against the USBR and the Friant Unit of the CVP) to approximately 45% of the flows of the San Joaquin River. A disagreement on one aspect of the application is currently before the Superior Court. In a 1998 application, the City of Stockton has asserted a claim to flows of the San Joaquin River based on the watershed-of-origin statutes. The City has recently resumed discussions to resolve outstanding protests to its application.

Within the Sacramento River Basin, three applications have been filed by the cities of Fairfield, Benicia and Vacaville. The cities are claiming a priority right as users within the watershed of origin, senior to the USBR and CVP. A public hearing is scheduled for June 2002 on this matter.

Geographic Applicability

State of California

Agencies or Parties Involved

CVP and SWP contractors, Reclamation, DWR, other water rights holders

Contact for More Information

<http://rubicon.water.ca.gov.v1cwp/ifrmwk.html>>

<http://www.latimes.com/news/local/la-000024824apr07.story>

Year of Initiation

1931

Water Rights (appropriative and riparian rights) **S7**

State Regulation

Brief Description

California water rights operate under two systems, riparian rights and appropriative rights. All water rights are subject to the “reasonable and beneficial use” doctrine in the California Constitution.

Under the riparian rights doctrine, landowners adjacent to a river, stream, pond, lake or well-defined underground channel have the right to divert water for the reasonable and beneficial use on that riparian land. Riparian rights attach only to the natural flow of a stream and cannot be stored. Riparian rights are correlative to other riparian rights, the natural flow is shared among rights holders. No permit is required for a riparian right. Riparian rights are not a significant portion of water rights held on most stream systems in California today.

Appropriative rights allow users to divert water for beneficial use on properties that may be far removed from the water source. Priority among appropriative rights is measured on a “first in time, first in right” basis and in contrast to riparian rights, long-term storage is allowed.

Appropriative rights initiated prior to 1914 (pre-1914 rights) involved basic procedures: posting notice of appropriation at the proposed point of diversion and recording a copy of the notice with the respective County Recorder. Under the Water Commission Act of 1914, a formal appropriation system was established and centralized at the state level (post-1914 rights). The Water Code now requires new appropriators to obtain a permit, pursuant certain procedures, from the State Water Resources Control Board prior to diverting water. An application filed with the SWRCB must specify the place where water will be used, period of diversion, purpose for which the water will be used, point of diversion, and type of diversion.

Potential Impact

The operations of and water rights for the Friant Unit of the CVP reflect arrangements between upstream power projects and downstream right holders. The contracts, agreements and/or stipulations associated with these water rights could influence the benefits and alternative analysis during the USJRBSI. Water rights upstream of Friant Dam are primarily for hydroelectric power uses while riparian and appropriative water rights downstream are primarily concentrated along the main stem of the lower San Joaquin River. Storage options proposed during the USJRBSI would have to operate within the parameters set forth by these rights.

Geographic Applicability

State of California

Agencies or Parties Involved

SWRCB

Contact for More Information

<http://www.rubicon.water.ca.gov/v1cwp/ch2ndx.html>,

Laypersons Guide to Water Rights Law, Prepared by the Water Education Foundation.

<http://rubicon.water.ca.gov.v1cwp/ifrmwk.html>>

Year of Initiation

1914 (Water Commission Act)

State Reclamation Board Water Code 8608 and 8571

S8

State Regulation

Brief Description

Water Code 8608 requires the State Reclamation Board to “establish and enforce standards for the maintenance and operation of levees, channels, and other flood control works of an authorized project or an adopted plan, including but not limited to standards for encroachment, construction, vegetation and erosion control measures.” These standards are intended to protect the public from floods and also account for recreation, fish and wildlife, and environmental factors. According to Code 8571 the board may also “adopt, amend or repeal rules to promote the convenient, orderly and just conduct of the business of the board and of the drainage district.” The “drainage district” includes the drainage areas for the Sacramento and San Joaquin Rivers.

Potential Impact

The storage alternatives developed from the USJRBSI may offer a degree of flood control, and consequently fall under the jurisdiction of these codes. Any potential USJRBSI-related actions must comply with the standards set forth by the State Reclamation Board, involving potential encroachment, construction, and vegetation and erosion control measures. According to Water Code 8571, a potential action that does not comply with the standards set forth may be negotiable, depending on whether it is determined that the action could enhance the “conduct of business of the drainage district”.

Geographic Applicability

State of California

Agencies or Parties Involved

State Reclamation Board, and Reclamation

Contact for More Information

<http://caselaw.lp.findlaw.com/cacodes/wat/8590-8611.html>

Porter-Cologne Act

S9

State Regulation

Brief Description

The Porter Cologne Act is California's comprehensive water quality control law. It designates the State Water Resources Control Board (SWRCB) as the authority on State water rights and water quality policy. In conjunction with this Act, nine Regional Water Quality Control Boards (RWQCB) were established to develop water quality control plans and to address water quality issues on a day-to-day regional level. These plans, also known as basin plans, have three major components: 1) beneficial uses that need to be protected for each water body, 2) surface and groundwater standards or water quality objectives (WQOs), and 3) an implementation program defining specific actions, a time schedule and a plan for monitoring compliance that are required to maintain these WQOs. The regional boards also have the responsibility of issuing the federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits. These permits regulate all regional "pollutant or nuisance discharges that may affect either surface water or groundwater." The inclusion of WQOs for groundwater in the Basin plan is an important difference between the state and federal (CWA) programs.

Potential Impact

The San Joaquin River basin is within the Central Valley RWQCB. Water quality in the San Joaquin River is affected by a variety of contaminants. Selenium, nutrient loading, boron, and high salinity have caused problems for environmental and agricultural uses in the lower River. If the USJRBSI is implemented and water storage is increased in the Upper San Joaquin River basin, releases of higher quality water could be used as a management tool to aid in the regulation of water quality in the lower reaches of the River. It will be necessary to inform the Central Valley RWQCB of any expected impacts on beneficial uses resulting from water quality changes. The Basin Plan is subject to a triennial review and may be amended under a structured process involving full public participation and state environmental review.

Geographic Applicability

State of California

Agencies or Parties Involved

Central Valley Regional Water Quality Control Board, State Water Resources Control Board, Reclamation

Contact for More Information

http://www.swrcb.ca.gov/rwqcb5/board_information/portercologne2000.PDF

Year of Initiation

1969

Resource Conservation Districts

S10

Locally governed districts authorized by California Law

Brief Description

The 103 Resource Conservation Districts (RCDs) authorized by state law in California are locally governed agencies with close ties to county governments. The primary objective of an RCD is to implement local conservation measures. RCD activities include the management of various resource conservation projects involving both soil and water; wildlife enhancement and restoration; exotic plant species control; watershed restoration; conservation planning; education; and other public services. Some districts act as “enterprise” districts, delivering services or products in exchange for a fee while other districts are “non-enterprise,” offering their services without requiring a fee for reimbursement.

Potential Impact

The San Joaquin Valley Region contains 24 RCDs that coordinate conservation efforts within their local regions. Communication with these districts in regards to their interests and concerns will be a component of the stakeholder USJRBSI process. The information that these districts have to offer will also be an asset in developing modeling assumptions and a selection of benefits.

Geographic Applicability

United States

Agencies or Parties Involved

County governments in the San Joaquin Basin, RCDs in the San Joaquin Basin,

Contact for More Information

<http://www.carcd.org/>

Year of Initiation

1971

Monterey Agreement

MOUs and Agreements

R1

Brief Description

The Monterey Agreement, signed in 1994 by DWR and SWP water contractors, addresses water supply reliability problems, provides greater flexibility in water operations, and provides greater financial stability for SWP contractors. The Monterey Agreement enables contractors to seek their own water supply reliability independently. Amendments were made to individual SWP water supply contracts, changing water allocation rules. Signatories agreed that, during drought years, water would be allocated in proportion to contractors' entitlements, ensuring that allocations for urban and agricultural needs are equally addressed.

The agreement also employs a number of water management tools, including: permanent water transfers; allowing contractors to temporarily turn back unused water each season into a pool to sell; the storage of water outside of SWP service areas; storage options in specific reservoirs; and the use of SWP facilities for conveyance of non SWP water. The Planning Conservation League (PCL) filed a lawsuit challenging the adequacy of the Monterey Agreement CEQA document. DWR and PCL are currently attempting to settle this lawsuit through mediation. Concurrently, DWR is working to re-do the EIR. Provisions of the Monterey Agreement are currently being implemented.

Potential Impact

Storage in the upper San Joaquin River watershed could facilitate use of some of the water management tools specific to the Monterey Agreement, however, this will depend on what uses the additional storage will serve.

Geographic Applicability

SWP facilities, applicable non-SWP facilities, SWP service areas

Agencies or Parties Involved

DWR, SWP water contractors

Contact for More Information

http://www.water.ca.gov/newsreleases/2000/Oct.25,00-Monterey_Info.html

Year of Initiation

Agreement was signed in 1994 and implementation began in 1995.

Agencies or Parties Involved

Reclamation, San Joaquin River Group Authority, U.S. Fish and Wildlife Service,
National Marine Fisheries Service, California Department of Water Resources,
California Department of Fish and Game

Contact for More Information

<http://www.mp.usbr.gov/mp140/vampdir/html>

Year of Initiation

2001

San Joaquin River Management Agreement

R3

MOUs and Agreements

Brief Description

The San Joaquin River Agreement was developed by Department of Interior, the San Joaquin River Group Authority (SJRGa) and its members, DWR, Department of Fish and Game, and CVP/SWP Export Interests. It identifies the flow needed to achieve objectives for the protection and enhancement of anadromous fish habitat and to provide other environmental benefits, as necessary to provide fishery protection equivalent to the 1995 Water Quality Control Plan. Water can be provided by the SJRGa through tributary reservoirs, bypass of diversions, indirect groundwater substitution, reduction of supplied surface water and increased efficiency.

Potential Impact

The amount of water required to meet these flow objectives varies annually depending on hydrologic conditions, therefore, this agreement requires close coordination with the SJRGa, which is responsible for making the water available. As described in the VAMP study, the "Division Agreement" specifies the supplier and incremental quantities of water that will be provided for the VAMP study under a specified set of conditions. If these sources were stressed during sequential critical years, the additional storage provided by the USJRBSI could potentially alleviate shortages and enhance management flexibility.

Geographic Applicability

San Joaquin, Stanislaus, Tuolumne, and the Merced Rivers

The rivers, storage, and conveyance facilities are located in Fresno, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tuolumne, and Claveras counties.

Agencies or Parties Involved

Member agencies include: Reclamation, San Joaquin River Group Authority, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Water Resources, California Department of Fish and Game.

Flows for the VAMP study are supplied by Modesto I.D., Merced I.D., South San Joaquin I.D., Oakdale I.D. Turlock I.D., San Joaquin River Exchange Contractors Water Authority.

Contact for More Information

<http://www.sjrpg.org/EIR/eiseir.htm>

<http://www.mp.usbr.gov/mp140/vampdir/html>

Period of Effect

1999-2010

Kings River Fisheries Management Program Framework Agreement (Kings River Agreement)

MOU/Agreement

R4

Brief Description

The Kings River Fisheries Management Program Framework Agreement of 1999, between the Kings River Conservation District (KRCd), Kings River Water Association (KRWA), and California Department of Fish and Game, consists of a number of actions that are designed to “protect and enhance fisheries habitat within the lower Kings River.” A 5-Year Implementation Plan was prepared to manage these actions and it must be updated annually through the 10-year implementation period. The main components of this plan include adaptive management, stream temperature monitoring, funding for habitat enhancement projects, enforcement, education and awareness programs, a stocking program, development of criteria for monitoring, and public angler access.

In addition to this plan, the KRWA made an internal operations agreement with Pacific Gas and Electric Company to enhance the program framework. Minimum flow requirements between Pine Flat Dam and Fresno Weir (9 miles) were increased to enhance fishery habitat. The agreement also requires a minimum of 100,000 acre-feet storage in the Pine Flat Reservoir to maintain a pool of cool water for fisheries downstream and in the reservoir. Prior to this agreement, reservoir operations were never regulated by a storage requirement.

Potential Impact

According to the Kings River Fisheries Management Program Framework Agreement, established water rights are to remain priority, balancing both fishery and other beneficial uses. However, during critical years, there may not be an adequate supply to meet both fishery and the water rights along the Kings River. Increases in storage might have the potential to alleviate the demand on water from the Kings River through the delivery of Friant water via the Friant-Kern Canal.

Geographic Applicability

Lower Kings River

Agencies or Parties Involved

Kings River Conservation District, Kings River Water Association, California Department of Fish and Game

Contact for More Information

<http://www.krcd.org/3c.html>

Year of Initiation

1999

Water Service Contracts (Exchange Contractors)

R5

MOUs and Agreements

Brief Description

Two contracts, the Purchase Contract and Exchange Contract of 1939 protect the historic riparian water rights of many users downstream of Friant Dam. These water users historically had the right to divert water from the San Joaquin River. Following the construction of the Friant Dam, the Exchange Contract guaranteed supply to these water users by diverting water from the Sacramento River (CVP water) through the Delta-Mendota Canal to the Mendota Pool in exchange for San Joaquin flows. If CVP water cannot be supplied, the Exchange Contractors reserve the right to “return to the San Joaquin River to satisfy their historic water rights.” If this is to occur, the Purchase Contract gives the federal government the right to purchase excess river flows that are not used along the San Joaquin River.

Potential Impact

Any legal decision involving the water rights in the area and/or any proposals that could potentially change the San Joaquin River could influence the Exchange Contractors’ water supply in a given year. Consequently, the Exchange Contractors focus on upholding their historic water rights and have a high degree of interest in the issues that affect the San Joaquin River. Current local education efforts provide information on issues/proposals involving the San Joaquin River, encouraging stakeholder involvement, and monitoring potential impacts that efforts may have on landowners and farmers.

Geographic Applicability

San Joaquin Basin

Agencies or Parties Involved

Exchange Contractors, Reclamation

Contact for More Information

Exchange Perspective

Year of Initiation

1939

Mendota Pool Contracts**(Mendota Pool 2001 Exchange Agreements)****R6****MOUs and Agreements****Brief Description**

The Mendota Pool 2001 Exchange Agreements are agreements between Reclamation and the Mendota Pool Group (MPG), an unincorporated association of farmers that reside in Westlands Water District and San Luis Water District. These agreements involve the exchange of up to 25,000 acre-feet of non-Central Valley Project groundwater. Non-CVP groundwater, adjacent to the Mendota Pool will be pumped into the Mendota Pool over a ten-year period for Reclamation's use. In exchange, Reclamation will provide an equivalent amount of CVP water for irrigation by the MPG, through the Delta-Mendota Canal. The amount of available groundwater will depend on the water year classification. During dry years, more groundwater will be pumped (40,000 acre-feet per year) than in wet years (0 acre-feet per year). This agreement is intended to increase water supply reliability to farmers south of the delta where the CVPIA, Endangered Species Act regulations, and the Delta Water Quality rules can potentially limit water deliveries.

Potential Impact

An increase in storage in the Upper San Joaquin River could increase management flexibility downstream and might have the potential to affect the amount of water flowing into the Mendota Pool from upstream. During critical years, the increase of storage in the Upper San Joaquin could enhance Reclamation's ability to provide CVP water to the MPG in exchange for non-CVP groundwater pumped adjacent to the Mendota Pool.

Geographic Applicability

Mendota Pool, well fields adjacent to the Mendota Pool, Westlands Water District, San Luis Water District

Agencies or Parties Involved

MPG, Reclamation, non-CVP well owners, water users in Westlands Water District and San Luis Water District

Contact for More Information

http://www.mp.usbr.gov/mp140/news_a/2001/mp-01-045.html

<http://www.epa.gov/fedrgstr/EPA-IMPACT/2002/January/Day-03/i33.htm>

Period of Effect

2001 - 2011

Coordinated Operation Agreement

R7

MOUs and Agreements

Brief Description

The Coordinated Operation Agreement, signed by the DWR and Reclamation in 1986, uses a sharing formula that stipulates the amounts of water credited to the SWP and CVP due to Central Valley runoff. In this agreement, Reclamation also agreed to uphold future water quality parameters stipulated by the SWRCB. Following the initiation of the Coordinated Operation Agreement, new operational constraints have been applied to both the CVP and SWP to uphold the biological opinions for the winter-run chinook salmon and delta smelts, resulting in review of the sharing formula.

Potential Impact

If the USJRBSI results in increased releases to the San Joaquin River, water that reaches the Bay-Delta may increase. The Coordinated Operation Agreement would stipulate how the additional flow into the Delta would be credited between the SWP and CVP. This could influence the sharing of water among users and could potentially require a review of the sharing formula.

Geographic Applicability

CVP and SWP facilities, rivers, reservoirs, water supply contractors

Agencies or Parties Involved

Reclamation, DWR, SWRCB

Contact for More Information

<http://rubicon.water.ca.gov/v1cwp/ifrm.html>

Year of Initiation

1986

Joint Use Agreement

MOUs and Agreements

R8

Brief Description

The Joint Use Agreement, between Reclamation and DWR, addresses the construction, operation, and maintenance of some of the San Luis unit CVP and SWP facilities. These facilities include the San Luis Dam Reservoir, Gianelli Pumping Generating Plant, O'Neil Dam and Forebay, San Luis Canal, Dos Amigos Pumping Plant, Los Banos Creek Detention Dam, and Little Panoche Creek Detention Dam. The parties agreed that Reclamation was to construct the facilities and the State of California was to reimburse Reclamation for 55% of the costs. In turn, the State operates the facilities, while Reclamation pays for 45% of the total operational and maintenance costs. This agreement also includes details regarding how the accounting and budgets are handled between the two agencies and how the capacity of the conveyance and storage facilities are shared. The Supplemental Agreement describes water and power forecasting, operation, exchanges, and measurement.

Potential Impact

The additional storage proposed by the USJRBSI could increase the amount of available CVP water on a regional level. Consequently, a greater proportion of CVP water may be observed at the San Luis Reservoir facilities. With no net increase of storage at the San Luis unit, this might result in the need to reevaluate the Federal and State shares of San Luis storage. The given parameters and operating constraints specified by the Joint Use Agreement may require adjustment to allot for this additional CVP water.

Geographic Applicability

San Luis Unit

Agencies or Parties Involved

DWR and Reclamation

Contact for More Information

Liz Partridge (209-836-6278)

Year of Initiation

1961

CALFED Bay Delta Program

R9

MOUs and Agreements

Authority

Brief Description

The CALFED Bay-Delta Program is a group of 18 state and federal agencies with management or regulatory responsibilities for the Bay-Delta area that have come together to address concerns about this region. The CALFED Program has four primary objectives: 1) improve water quality; 2) improve and increase habitat and ecological functions; 3) reduce the mismatch between supply and demand; and 4) reduce risk from catastrophic levee failure. These objectives are being met through a variety of programs currently under implementation.

Potential Impact

The CALFED Programmatic Record of Decision, issued in August 2000, states that 250-700 TAF of additional storage in the upper San Joaquin River basin should be studied during the first 7 years to determine if it could be a beneficial long-term project. The purpose of this storage is to “contribute to restoration of and improve water quality for the San Joaquin River and facilitate conjunctive water management and water exchanges that improve the quality of water deliveries to urban communities.” The ROD indicates that the additional storage could come from “enlargement of Millerton Lake at Friant Dam or a functionally equivalent storage program in the region.” The USJRBSI is providing the study called for in the Record of Decision.

Geographic Applicability

The CALFED study area includes areas that drain into the Bay-Delta, or receive supplies from the Bay-Delta, including the San Joaquin and Tulare basins.

Agencies or Parties Involved

CA DWR, CA DFG, Reclamation, Delta Protection Commission, SWRCB, CA DF&A, Reclamation, USFWS, BLM, USGS, USACE, USEPA, NMFS, NRCS, USFS, WAPA

Contact for More Information

<http://calfed.ca.gov>

Period of Effect

1995 – 2030

Integrated Storage Investigation (ISI) Memoranda of Understanding (MOUs) for Conjunctive Use

R10

MOUs and Agreements

Brief Description

The ISI Conjunctive Water Management Program has established MOUs with local agencies in an effort to form “partnerships with local agencies and stakeholders to share technical data and costs for planning and developing locally controlled and managed conjunctive water management projects.” The program provides assistance to basin-wide planning efforts to meet water needs uses, monitor groundwater basins, and manage groundwater and surface water resources.

Potential Impact

The ISI Conjunctive Water Management Program has established MOUs with conjunctive use water agencies in the San Joaquin watershed. Parties to these MOUs, are conducting a number of studies in the San Joaquin basin in effort to “identify potential conjunctive use opportunities,” explore potential recharge sites, develop conjunctive water management programs, and involve stakeholders. The USJRBSI will coordinate with the Conjunctive Use Programs (USJRBSI is and ISI program) to ensure that potential surface and groundwater storage projects work together. Additional surface water storage provided by the proposed alternative could also enhance current conjunctive use options and management flexibility.

Geographic Applicability

Designated water agency areas in the State of California

Agencies or Parties Involved

Local water agencies, Conjunctive Water Management Program

Contact for More Information

DWR, Division of Planning and Local Assistance, Biennial Report – July 1, 1999 through June 30, 2001

Year of Initiation

Varies

Mammoth Pool Agreement

R11

MOUs and Agreements

Brief Description

The Mammoth Pool Agreement is a contract between the Edison Company and Reclamation pertaining to the operations of Mammoth Pool (owned by Edison Company) and existing projects on the San Joaquin River. This contract gives Edison Company the right to “divert and store” water from the San Joaquin River and its tributaries in Mammoth Pool for the purposes of hydroelectric power and domestic use as long as operations do not violate the water exchange contracts and other non-superceding previous agreements. Operations of Mammoth Pool must also adhere to specified limitations on the quantity of storage at the end of a water year, based upon runoff and the storage in the previous water year. A temporary exception to these limitations may be made to increase beneficial use if the parties agree.

Potential Impact

The Mammoth Pool operational guidelines are based on predetermined storage capacities upstream. The potential increase in storage capacity being investigated by the USJRBSI might change the storage capacity in facilities near Mammoth Pool. If it is determined that the operational constraints established in the Mammoth Pool Agreement are no longer applicable, adjustments to the agreement may be appropriate.

Geographic Applicability

Mammoth Pool and other applicable storage facilities operated by Edison Company and Reclamation in the San Joaquin Watershed

Agencies or Parties Involved

Reclamation, Edison Company

Contact for More Information

Tony Buelna, Reclamation, Fresno, 559-487-5117

Year of Initiation

1957

San Joaquin River Management Program

R12

MOUs and Agreements

Brief Description

The San Joaquin River Management Program (SJRMPP) required development of a plan, which was completed in 1995, to address six specific problem areas in the San Joaquin Basin: flood protection; water supply; water quality; recreation; fisheries; and wildlife. SJRMPP has had legislative authorization under three separate bills (AB 3603, AB 3048, and SB 807) since its inception in 1990. The original authorization mandated consensus based decision-making, and authorized an Advisory Council and an Action Team (See Agencies and Parties Involved, below). SJRMPP now provides a CALFED regional forum in the San Joaquin Basin for local agencies, environmental groups, agriculture, business, industry, recreation, land users, and other interests to work directly with state and federal agencies to develop ideas and to address challenges.

Potential Impact

SJRMPP provides a forum to introduce and support projects to stem further deterioration in the San Joaquin River system and to develop consensus-based solutions to water-use problems within the system. The 1995 SJRMPP Plan includes additional storage on the upper San Joaquin; specifically, the enlargement of Friant Dam and construction of Fine Gold Reservoir. It is important to keep this group involved in the USJRBSI so that the actions from both processes complement each other.

Geographic Applicability

The SJRMPP defines the San Joaquin River system as the San Joaquin River from Friant Dam downstream to the northern boundary of the South Delta Water Agency just south of Victoria Canal, including all other tributaries of the San Joaquin River up to the first major dam, and the North Fork of the Kings River.

Agencies and Parties Involved

The Advisory Council includes: federal and state agency directors or a designees; representatives from counties and cities within the area; entities representing water user interests within those counties; and environmental, fisheries, and wildlife groups. The Action Team includes members appointed by the Advisory Council.

Contact

<http://www.dpla.water.ca.gov/sjd/sjrmpp/index.html>

Ernie Taylor (559) 230-3352, etaylor@water.ca.gov

Period of Effect

1990 - 2030

Delta Pumping Plant Fish Protection (4-Pumps) Agreement R13 **MOUs and Agreements**

Brief Description

This agreement seeks to offset the potential adverse impacts of installing and operating pumps that export water from the Delta. When the SWP Harvey O. Banks Delta Pumping Plant was constructed, seven of the eleven proposed pumps were installed and the remaining four were designated for installation at a later date. In 1986, the directors of the Departments of Water Resources and Fish and Game signed an agreement intended to offset adverse fish impacts caused by the installation of the four pumps. The agreement provides methods for the estimation of annual fish losses and mitigation credits, implementation of fish mitigation projects, obtaining associated funding sources, and the evaluation of potential fish mitigation projects for funding by the agreement.

Potential Impact

An increase in storage capacity in the upper San Joaquin River Basin could potentially increase river flows in the in the San Joaquin River. As a result the range of anadromous fish populations in the San Joaquin River upstream of the confluence with the Merced River may increase. This could also increase the amount of available area where the 4-Pumps Agreement could potentially fund fish mitigation projects for salmon or steelhead. Currently, the 4-Pumps Agreement does not have any mitigation projects upstream of the San Joaquin and Merced River confluence.

Geographic Applicability

Sacramento and San Joaquin River systems, which includes all tributaries as long as the project is below major rim dams and benefit salmon, striped bass or steelhead trout.

Agencies and Parties Involved

Departments of Water Resources, Fish and Game, State Water Contractors

Contact

Stephanie Spar (916) 227-7536, sspaar@water.ca.gov

Period of Effect

1986 - 2030

Sacramento-San Joaquin River Basin Comprehensive Study R14

Regional Planning Effort

Brief Description

The Sacramento-San Joaquin River Basin Comprehensive Study is the largest comprehensive study of the Central Valley Flood systems ever performed and is intended to “develop systemic improvements in flood management through a watershed approach.” Specific tasks include an assessment of four major flood events (1983, 1986, 1995, and 1997), the identification and analysis of potential flood problems and environmental issues, and the provision of recommendations on flood control improvements. Hydrologic and hydraulic models and geographic information systems (GIS) are being used in conjunction with a stakeholder involvement process to fulfill the study goals. The master plans of this study will be presented in a form of a programmatic EIS/EIR that addresses flood damage reduction and ecosystem restoration on both the Sacramento and San Joaquin Rivers. Site-specific issues will be addressed in subsequent documents.

Potential Impact

The USJRBSI should consider the results from the Sacramento-San Joaquin Basin Comprehensive Study, which are scheduled for release in 2002. This study could potentially provide recommendations on water management operations or infrastructure changes in the San Joaquin River Basin that could influence the investigation. Information from this study could aid in the development and selection of storage options that could either reduce flood damages or enhance flood control.

Geographic Applicability

Central Valley

Agencies or Parties Involved

U.S. Army Corp of Engineers, Reclamation Board of California

Contact for More Information

http://wwwdwr.water.ca.gov/dir-DWR_News/fall99/master.html

Target Year of Completion

2002

Section 3

Summary Chart and Tables

Part of the complexity of the context in which the USJRBSI is being conducted relates to the interrelationships among the laws, regulations, programs, plans, and the agencies and groups responsible for their implementation. This section provides four summary presentations of the materials contained in Section 2:

- Figure 1, which depicts the geographic and federal-state-regional/local applicability of the authorities, regulations, programs and groups;
- Figure 2, which depicts the organizational relationships among agencies in the San Joaquin region;
- Table 1, which lists each authority, regulation, program and group and the agencies associated with it; and
- Table 2, which lists for each agency mentioned in Section 2, the authorities, regulations, programs and groups with which it is associated.

Appendix A includes definitions for the acronyms used in this document.

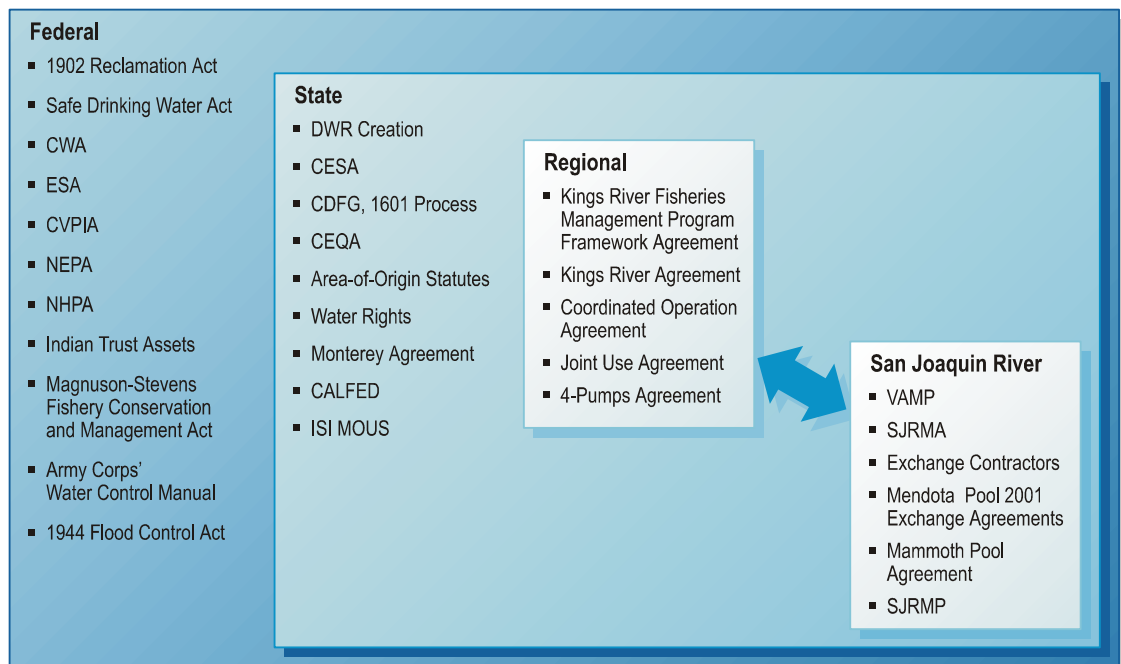


Figure 1
Applicability of Authorities, Regulations, Programs and Groups

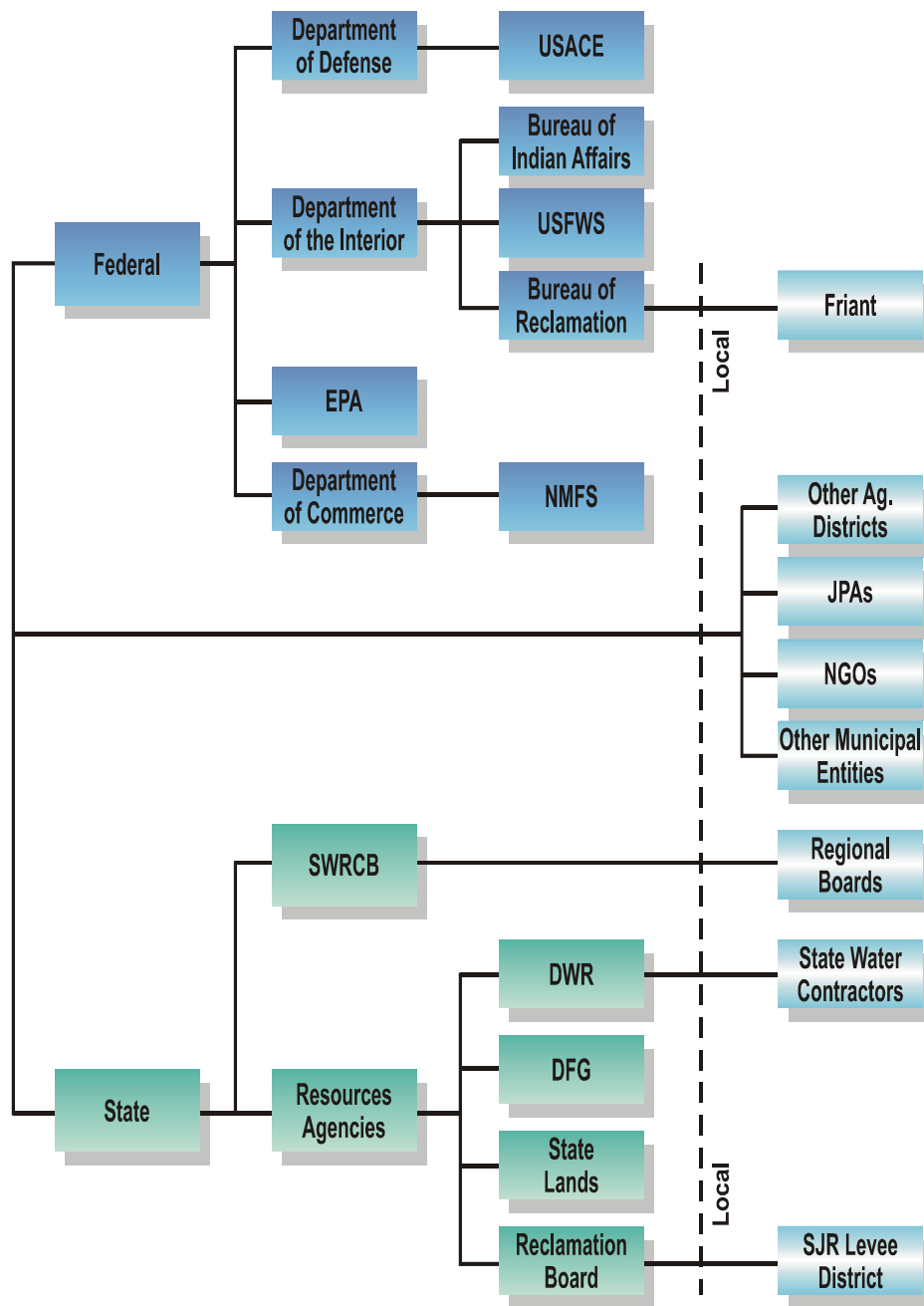


Figure 2
 Organizational Relationships Among Agencies in the San Joaquin Area

Table 1 Parties Involved in Each Authority, Regulation, Program or Group	
Authority, Regulation, Program or Group	Parties Involved
1902 Reclamation Act	Reclamation
1944 Flood Control Act	Reclamation, DWR, USACE
Area of Origin Statutes	CVP/SWP Contractors, Reclamation, DWR
CALFED Bay Delta Program	DWR, CDFG, Reclamation, Delta Protection Commission, SWRCB, CDF&A, USFWS, BLM, USGS, USACE, USEPA, NMFS, NRCS, USFS, WAPA
California Department of Fish and Game, 1601 Process	CDFG, public agencies
California Department of Fish and Game, 5937 Process	CDFG, public agencies
California Endangered Species Act	CDFG
CEQA	State Lead Agency (DWR for USJRBSI)
Clean Air Act General Conformity Rule	Reclamation
Clean Water Act	USEPA, RWQCB's
Coordinated Operation Agreement	Reclamation, DWR, SWRCB
CVPIA	Reclamation, USFWS
Delta Pumping Plant Fish Protection Agreement	DWR, CDFG, State Water Contractors
DWR Creation	DWR
Executive Order 11988 (Floodplain Management, 1977)	Reclamation
Federal Endangered Species Act	USFWS, Reclamation, DWR, NMFS
Indian Trust Assets	Federally recognized Indian tribes, Office of American Indian Trust, Solicitor's Office, Reclamation's Mid-Pacific Region Native American Affairs Office/Area Office Native American Affairs Coordinator.
Integrated Storage Investigation Memoranda of Understanding for Conjunctive Use	Local Water Agencies, Conjunctive Water Management Program
Joint Use Agreement	DWR, Reclamation
Kings River Agreement	Kings River Conservation District, Kings River Water Association, CDFG
Magnuson-Stevens Fishery Conservation and Mgt. Act	NMFS
Mammoth Pool Agreement	Reclamation, Edison Company
Mendota Pool Contracts	MPG, Reclamation, non-CVP well owners, Westlands/San Luis Water District water users
Monterey Agreement	DWR, SWP water contractors
National Historic Preservation Act	Federal - ACHP, Reclamation; State - SHPO; If Indian Tribal lands are affected - THPO
NEPA	Federal Lead Agency
Porter-Cologne Act	Central Valley RWQCB, SWRCB, Reclamation
Resource Conservation and Development Program	NRCS, volunteers, state, tribal, local governments, and non-profit organizations
Resource Conservation Districts	County governments in the San Joaquin Basin, RCD's in the San Joaquin Basin
Sacramento-San Joaquin River Basin Comprehensive Study	USACE, Reclamation
Safe Drinking Water Act	California Dept. Health Services, Local Water Suppliers
San Joaquin River Management Agreement	US Dept. of Interior, Reclamation (Mid-Pacific Region), San Joaquin River Group Authority, USFWS, NMFS, DWR, CDFG
San Joaquin River Management Program	Advisory Council (reps from state/federal agencies, counties, cities, water users, fisheries and wildlife groups)
State Reclamation Board Water Code 8608 and 8571	State Reclamation Board, Reclamation
USACE Water Control Manual	
Vernalis Adaptive Management Plan (VAMP)	US Dept. of Interior, Reclamation (Mid-Pacific Region), San Joaquin River Group Authority, USFWS, NMFS, DWR, CDFG
Water Rights (Appropriative and Riparian)	SWRCB
Water Service Contractors (Exchange Constructors)	Exchange Contractors, Reclamation
Watershed Protection and Flood Prevention Act	Soil Conservation Service, Secretary of Interior, US Congress, local organizations (soil/water conservation districts, flood prevention/control districts, nonprofit irrigation or reservoir companies, water users' associations, tribal organizations)

Table 2 Authorities, Regulations, Programs and Groups Associated with Each Agency	
Agencies	Authority, Regulation, Program or Group
ACHP	National Historic Preservation Act
BLM	CALFED Bay Delta Program
California Dept. of Health Services	Safe Drinking Water Act
CDF&A	CALFED Bay Delta Program
CDFG	CESA, CDFG 1601 Process, CDFG 5937 Process, VAMP, San Joaquin River Management Agreement, Kings River Agreement, CALFED Bay Delta Program, San Joaquin River Management Program, 4-Pumps Agreement
Conjunctive Water Management Program	Integrated Storage Investigation Memoranda of Understanding for Conjunctive Use
CVP Contractors	Area of Origin Statutes, Exchange Contractors
Delta Protection Commission	CALFED Bay Delta Program
DWR	Federal ESA, 1944 Flood Control Act, DWR Creation, Area of Origin Statutes, Monterey Agreement, VAMP, San Joaquin River Management Agreement, Coordinated Operation Agreement, Joint Use Agreement, CALFED Bay Delta Program, San Joaquin River Management Program, 4-Pumps Agreement
Edison Company	Mammoth Pool Agreement
Kings River Conservation District	Kings River Agreement
Kings River Water Association	Kings River Agreement
Local Water Agencies	Integrated Storage Investigation Memoranda of Understanding for Conjunctive Use, San Joaquin River Management Program, Watershed Protection and Flood Prevention Act
MPG	Mendota Pool Agreement
NMFS	Federal ESA, Magnuson-Stevens Fishery Conservation and Mgt. Act, VAMP, San Joaquin River Management Program, San Joaquin River Management Agreement, CALFED Bay Delta Program
NRCS	Resource Conservation and Development Program, CALFED Bay Delta Program
Office of American Indian Trust	Indian Trust Assets
Reclamation	1902 Reclamation Act, Federal ESA, CVPIA, NHPA, 1944 Flood Control Act, Executive Order 11988 (Floodplain Management 1977), Clean Air Act Conformity Rule, Area of Origin Statutes, State Reclamation Board Water Code 8608 and 8571, Porter-Cologne Act, VAMP, San Joaquin River Management Agreement, Water Service Contractors, Mendota Pool Contracts, Coordinated Operation Agreement, Joint Use Agreement, CALFED Bay Delta Program, Mammoth Pool Agreement, Sacramento - San Joaquin River Basin Comprehensive Study, Indian Trust Assets, The Central Valley Project (Public Law 75-392 Section 2)
RWQCB's	Clean Water Act, Porter-Cologne Act, San Joaquin River Management Program
San Joaquin River Group Authority	VAMP, San Joaquin, River Management Agreement
San Luis Water District Water Users	Mendota Pool Agreement
Secretary of the Interior	Watershed Protection and Flood Prevention Act, VAMP, San Joaquin River Management Agreement
SHPO	National Historic Preservation Act
Soil Conservation Service	Watershed Protection and Flood Prevention Act
State Reclamation Board	State Reclamation Board Water Code 8608 and 8571
SWP Contractors	Area of Origin Statutes, Monterey Agreement, 4-Pumps Agreement
SWRCB	Water Rights (Appropriative and Riparian), Porter-Cologne Act, Coordinated Operation Agreement, CALFED Bay Delta Program
THPO	National Historic Preservation Act

Agencies	Authority, Regulation, Program or Group
USACE	1944 Flood Control Act, CALFED Bay Delta Program, San Joaquin River Management Program, Sacramento - San Joaquin River Basin Comprehensive Study
USFS	CALFED Bay Delta Program
USFWS	Federal ESA, CVPIA, VAMP, San Joaquin River Management Agreement, CALFED Bay Delta Program, San Joaquin River Management Program
USGS	CALFED Bay Delta Program
WAPA	CALFED Bay Delta Program
Westland District Water Users	Mendota Pool Agreement

Appendix A

List of Acronyms

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
BLM	Bureau of Land Management
CAA	Clean Air Act
CALFED	CALFED Bay-Delta Program
CARCD	California Association of Resource Conservation Districts
CDF&A	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
COA	Coordinated Operation Agreement
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
DHS	California Department of Health and Services
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
GIS	Geographic Information System
ID	Irrigation District
IS	Initial Study
ISI	Integrated Storage Investigation
JPA	Joint Powers Authority
KRWA	Kings River Water Association
KRCD	Kings River Conservation District.
MCL	Maximum Contaminant Levels
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MPG	Mendota Pool Group
NARC&DC	National Association of Resource Conservation and Development Councils

Vernalis Adaptive Management Plan (VAMP)

R2

MOUs and Agreements

Brief Description

The Vernalis Adaptive Management Plan (VAMP) is a science based adaptive management plan designed to determine and protect the survival and transport of salmon smolts through the Delta in relation to the flow of the San Joaquin River, SWP/CVP exports, and the operation of a fish barrier located at the head of Old River. This study calls for a regulated pulse flow level at Vernalis and a predetermined SWP/CVP export rate for a 31-day period during April and May.

The San Joaquin River Agreement (SJRA) stipulates the target flow rate of the San Joaquin River and the water suppliers during this period, based on the San Joaquin Valley Water Year Hydrologic Classification (index of water supply availability and wetness). San Joaquin River Group Authority is responsible for organizing the water supply for the VAMP study. Districts that provide water for this study include Modesto I.D., Merced I.D., South San Joaquin I.D., Oakdale I.D. Turlock I.D., and the San Joaquin River Exchange Contractors Water Authority.

VAMP analyses will use hydrologic, water quality, and fish monitoring data. This program will, in conjunction with other non-VAMP procedures, also attempt to achieve a doubling of natural salmon production by improving smolt survival. The VAMP seeks to “provide environmental benefits on the lower San Joaquin River during the April-May Pulse Flow Period at a level of protection equivalent of the Vernalis flow objectives of the 1995 Water Quality Control Plan (WQCP) and implement the remaining San Joaquin River Portion of the 1995 WQCP.” Additional water may be made available to the Department of the Interior to assist in meeting other benefits, such as summer and fall flow related purposes of CVPIA and the 1995 WQCP.

Potential Impact

If the VAMP flow sources are stressed during sequential critical years, the additional storage provided by the USJRBSI could potentially alleviate demands on the other supply sources by enhancing management flexibility. The SJRA states that releases from Friant Dam cannot be used to satisfy VAMP flows because they are intended for use in the Friant Division and are not acquired from willing sellers. It is not clear, however, whether this would pertain to the additional water storage. Friant Dam releases have the potential to provide benefits to the VAMP.

Geographic Applicability

San Joaquin, Stanislaus, Tuolumne, and Merced Rivers

The rivers, storage, and conveyance facilities are located in Fresno, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tuolumne, and Claveras counties.

NEPA	National Environmental Protection Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Services
NRCD	Natural Resource Conservation District
NRHP	National Register of Historic Places
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
PCL	Planning Conservation League
RC&D	Resource Conservation and Development
RCDs	Resource Conservation Districts
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SIP	State Implementation Plan
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Office
SJRA	San Joaquin River Agreement
SJTMP	San Joaquin River Management Plan
SWP	State Water Project
SWRCB	State Water Regional Control Board
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United State Geological Survey
USJRBSI	Upper San Joaquin River Basin Storage Investigation
VAMP	Vernalis Adaptive Management Plan
WAPA	Western Area Power Administration
WQCP	Water Quality Control Plan
WQOs	Water Quality Objectives